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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,394	04/12/2004	James D. Kelly	BP2387.5	2898

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EXAMINER

TRUONG, BAO Q

ART UNIT PAPER NUMBER

2187

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,394

Applicant(s)

KELLY, JAMES D.

Examiner

Bao Q Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,9-12,16 and 17 is/are rejected.
- 7) ☒ Claim(s) 6-8,13-15 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 22 July 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RD

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1. The instant application having Application No. 10/822,394 has a total of 20 claims pending in the application; there are 3 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. § 1.63.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on Patent Application No. 10/269,913 filed on 11 October 2002 and based on Provisional Application No. 60/511,033 filed on 14 October 2003. It is noted, however, applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date of Patent Application No. 10/269,913 under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

Information Disclosure Statement

4. As required by M.P.E.P § 609 (C), the applicant's submission of the Information Disclosure Statement, dated on 22 July 2004, is acknowledged by the examiner; and the cited reference has been considered in the examination of the claims now pending. As required by M.P.E.P § 609 C (2), a copy of the PTO-1449 initialed and dated by the examiner is attached to the instant office action.

Drawings

5. The applicant's drawings submitted are acceptable for examination purposes.

Claim Objections

6. Claim 16 is objected to because of the following informalities:

Claim 16 recites "the plurality of probes" one line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim. In this Office Action, the examiner will consider this limitation as "the plurality of strobes".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-5, 9-12, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Nobunaga (U.S. Pub. No. 2005/0005183 A1).

Referring to claim 1, Nobunaga discloses an apparatus comprising:

a storage device to receive incoming data as a first-in first-out (FIFO) and its control logic (see figure 1: combination of elements 107-109) to receive data from a memory bank (see figure 1: DR); and

a select circuit as a clock multiplexer (see figure 1: element 105) to select between a first strobe to strobe in the incoming data at a first strobe rate (see figure 1: element CLK_STD and page 2: paragraphs [0029-0030]) and a second strobe to strobe in the incoming data at a second strobe rate (see figure 1: element CLK_FDA and page 2: paragraphs [0029-0030]).

As to claim 2, Nobunaga further discloses that the selected circuit is a multiplexer (see figure 1: element 105 and page 2: paragraph [0029]).

As to claim 3, Nobunaga further discloses that the select circuit is to receive a select signal from a value stored in a register (see figure 1: element 101 and page 2: paragraphs [0024-0025 and 0029]).

As to claim 4, Nobunaga further discloses a register to store a programmable value used to select between the first and second strobes (see figure 1: element 101 and page 2: paragraphs [0024-0025 and 0029]).

As to claim 5, Nobunaga further discloses that the storage device is a first-in, first-out (FIFO) buffer to receive incoming data to be buffered for transfer onto a data bus having different timing than the first or second strobe rate as a first-in first-out (FIFO) and its control logic (see figure 1: combination of elements 107-109) to receive data from a memory bank (see figure 1: DR) to processor (system) data bus (see figure 8: element 862).

Referring to claim 9, Nobunaga discloses an integrated circuit comprising:

an interim first-in, first-out (FIFO) buffer to strobe in data from a memory based on a first strobe signal or a second strobe signal as a first-in first-out (FIFO) and its control logic (see figure 1: combination of elements 107-109) to receive data from a memory bank (see figure 1: DR) based on a first strobe signal and a second strobe signal (see figure 1: elements CLK_STD, CLK_FDA and page 2: paragraphs [0029-0030]), the strobe signals based on a configuration of the memory to be used to store the data (see page 2: paragraphs [0024-0025]); and

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a select circuit as a clock multiplexer (see figure 1: element 105) to select between the first strobe signal and the second strobe signal, the first and second strobe signals to have different strobe rates to strobe in the data from the memory (see figure 1: elements CLK_STD, CLK_FDA and page 2: paragraphs [0029-0030]).

As to claim 10, Nobunaga further discloses that the select circuit is a multiplexer (see figure 1: element 105 and page 2: paragraph [0029]).

As to claim 11, Nobunaga further discloses that the multiplexer is to receive a select signal from a value stored in a register (see figure 1: element 101 and page 2: paragraphs [0024-0025 and 0029]).

As to claim 12, Nobunaga further discloses a register to store a programmable value to be used by the multiplexer to select between the first strobe signal and the second strobe signal (see figure 1: element 101 and page 2: paragraphs [0024-0025 and 0029]).

Referring to claim 16, Nobunaga teaches a method comprising:

generating a plurality of strobes as generating a standard clock strobe (CLK_STD) and a fast clock strobe (CLK_FDA) (see figure 1 and page 2: paragraphs [0029]);

selecting one strobe from the plurality of strobes (see figure 1: element 105 and page 2: paragraphs [0029]); and

receiving incoming data using the selected strobe (see page 2: paragraphs [0030]);

As to claim 17, Nobunaga further teaches multiplexing the plurality of strobes and using a select signal for selecting the one strobe (see figure 1: element 105 and page 2: paragraphs [0029-0030]).

Allowable Subject Matter

9. Claims 6-8, 13-15, and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

US 2005/0005183 A1, US 2003/0088611 A1, US 6,529,988 B1, US 6,385,674 B1, and US 5,956,524 A discuss variable strobe-rate FIFO structures.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q Truong whose telephone number is (571) 272-4202. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00 PM (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks, can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Bao Q Truong

BT

Patent Examiner

15 September 2005

Donald A Sparks

Donald Sparks

Supervisory Patent Examiner

Technology Center 2100